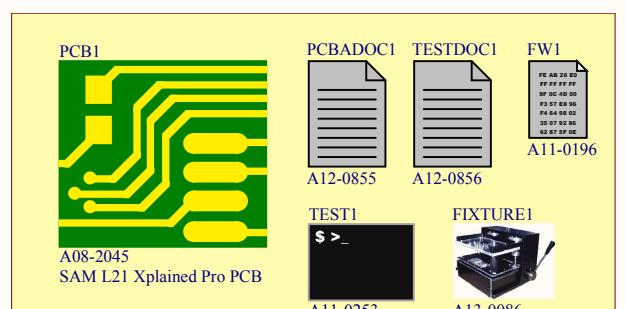
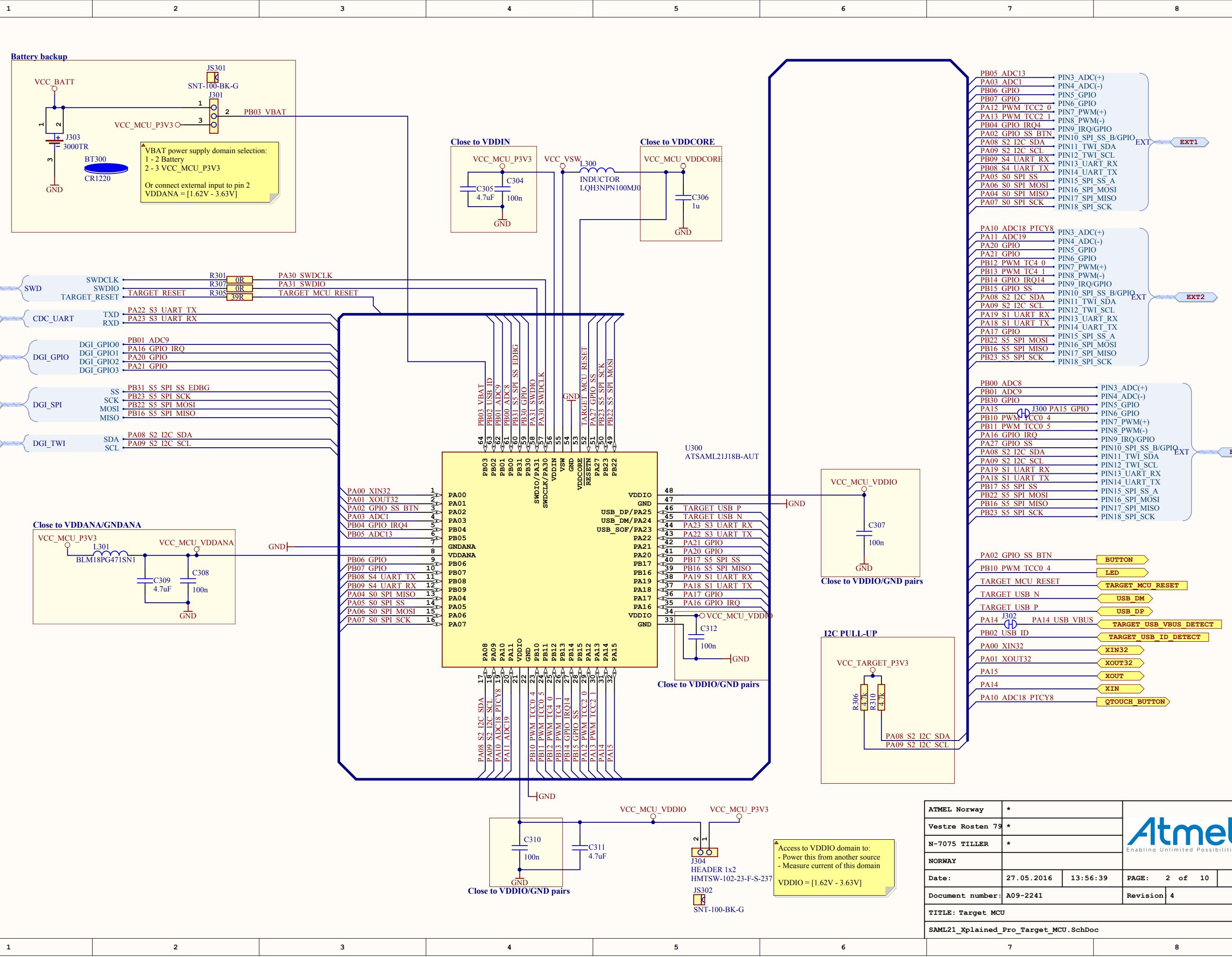


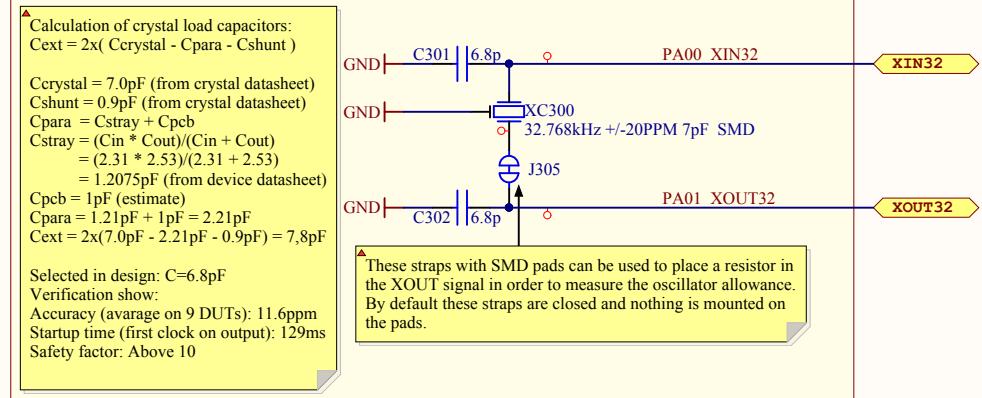
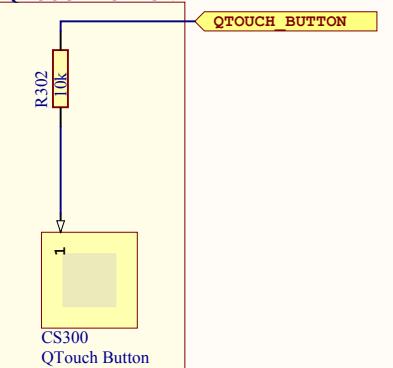
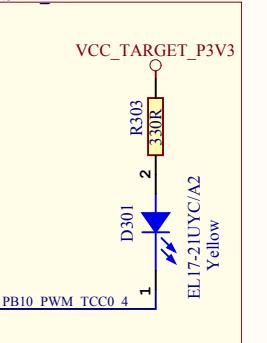
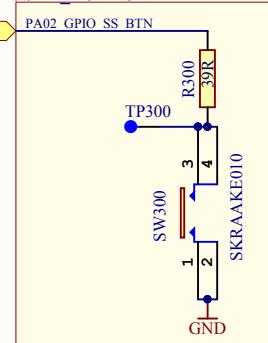
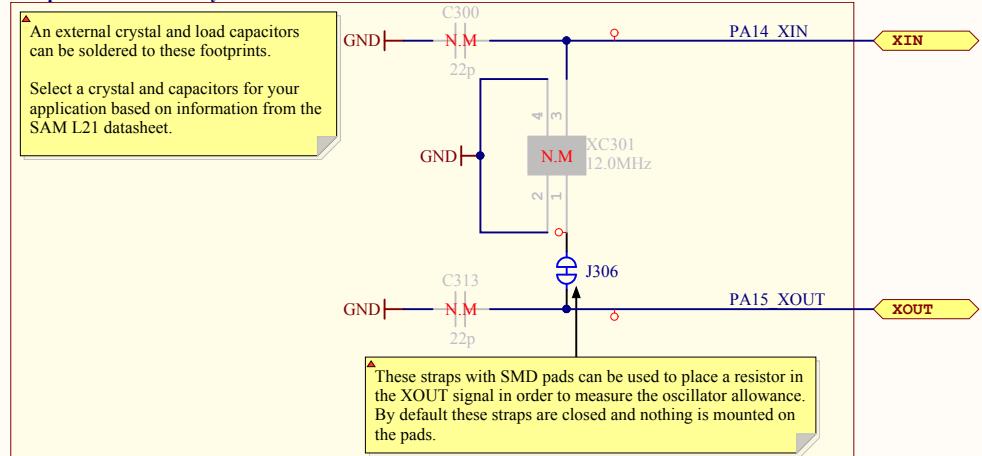
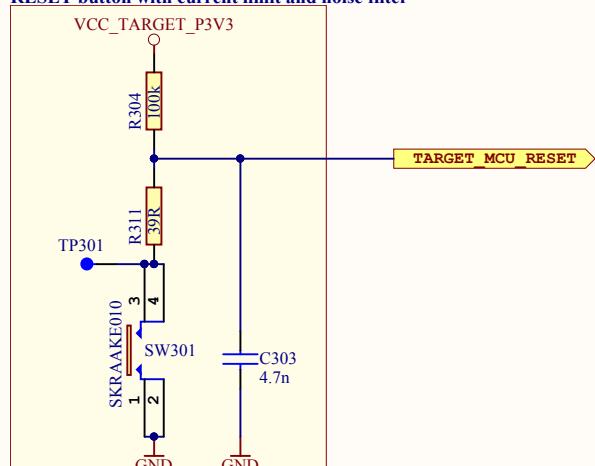
LABEL1
 Product number/revision
 Serial number

Label PCB

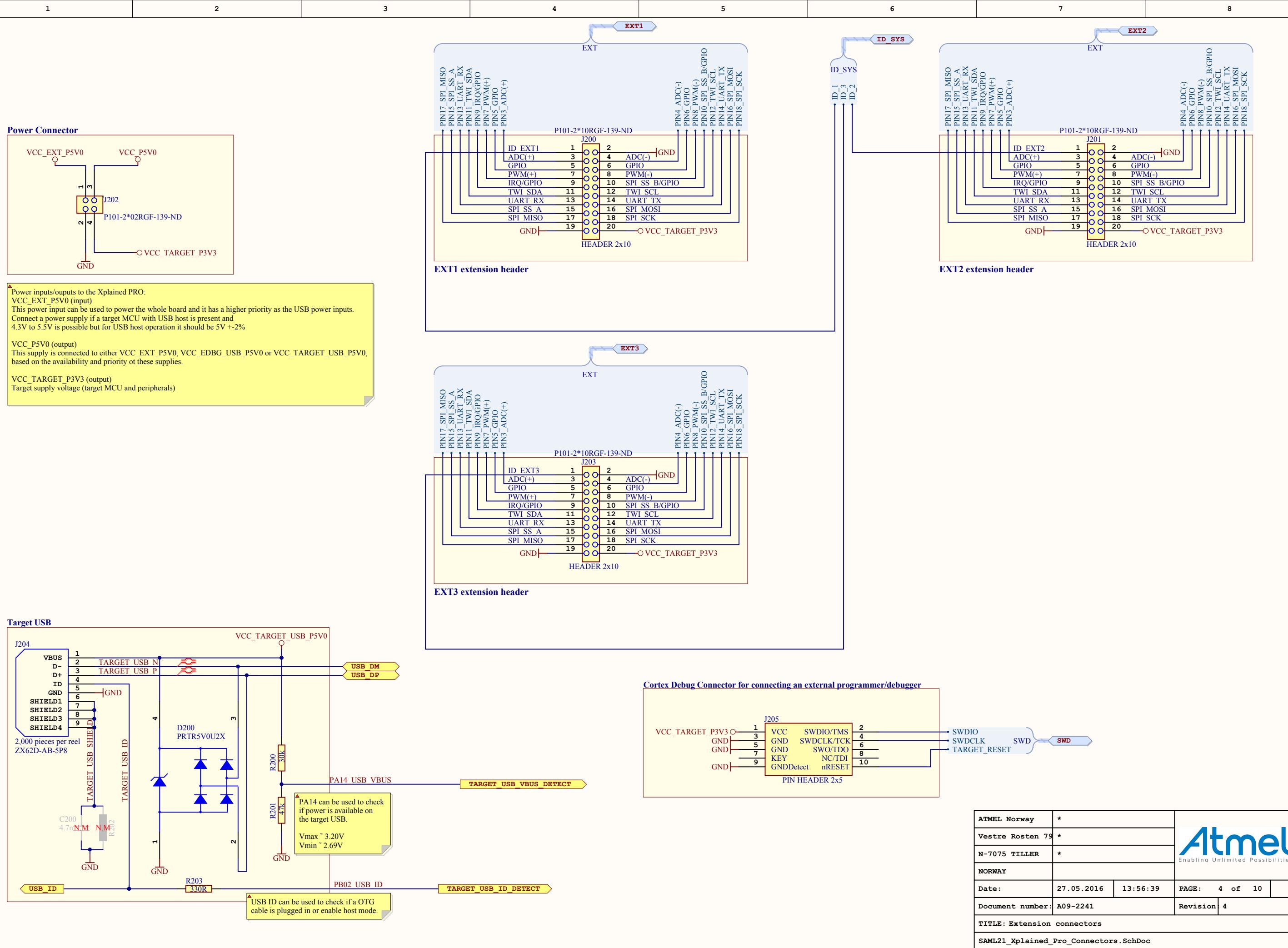


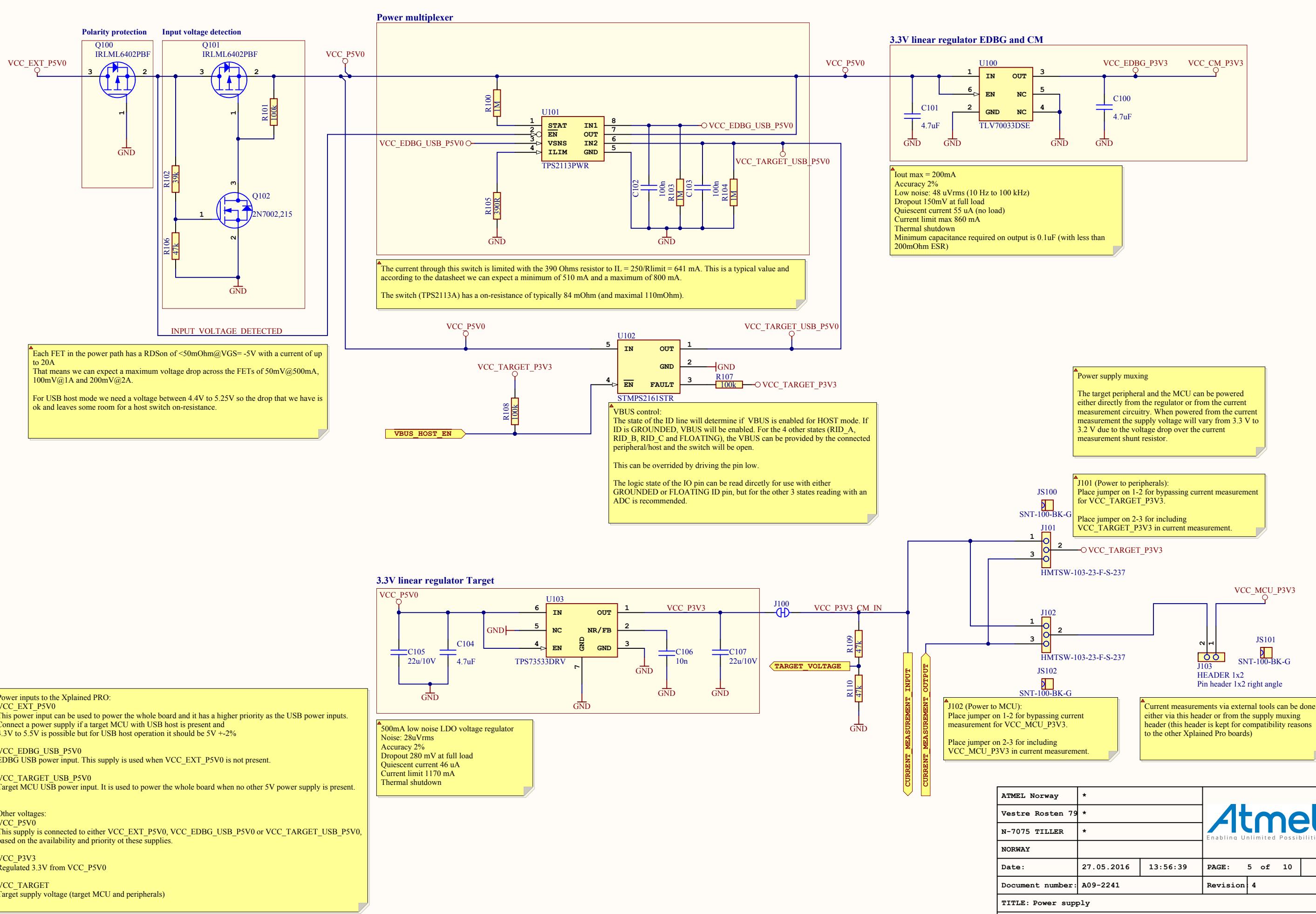
ATMEL Norway	*	
Vestre Rosten 79	*	
N-7075 TILLER	*	
NORWAY		
Date:	27.05.2016 13:56:38	PAGE: 1 of 10
Document number:	A09-2241	Revision 4
TITLE: Top Level Schematics		
SAML21_Xplained_Pro_TopLevel.SchDoc		

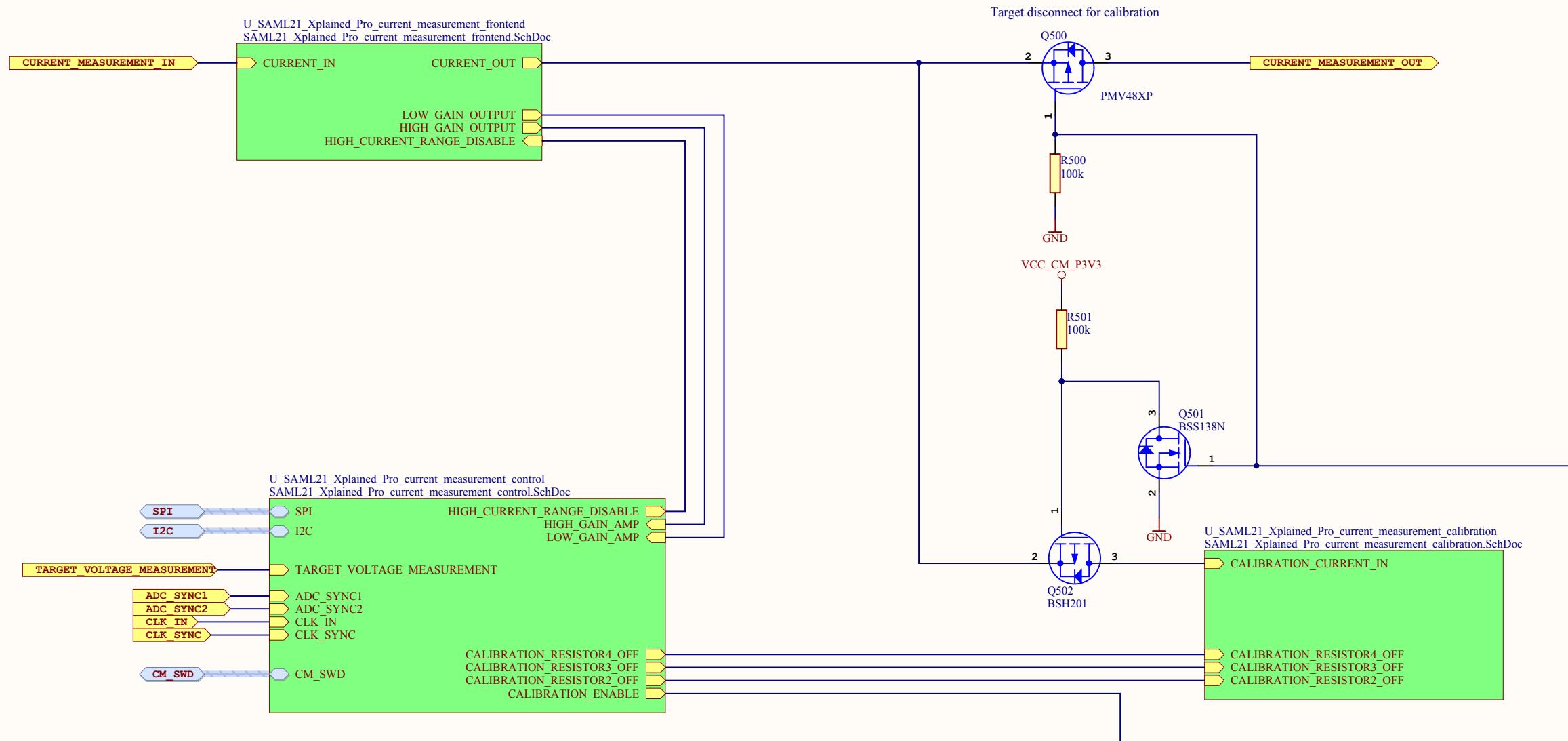


32 kHz Crystal**QTOUCH BUTTON****USER_LED****USER_BUTTON****Footprint for external crystal****RESET button with current limit and noise filter**

ATMEL Norway	*		
Vestre Rosten 79	*		
N-7075 TILLER	*		
NORWAY			
Date:	27.05.2016	13:56:39	PAGE: 3 of 10
Document number:	A09-2241		Revision 4
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SAML21_Xplained_Pro_SAML21_peripherals.SchDoc			

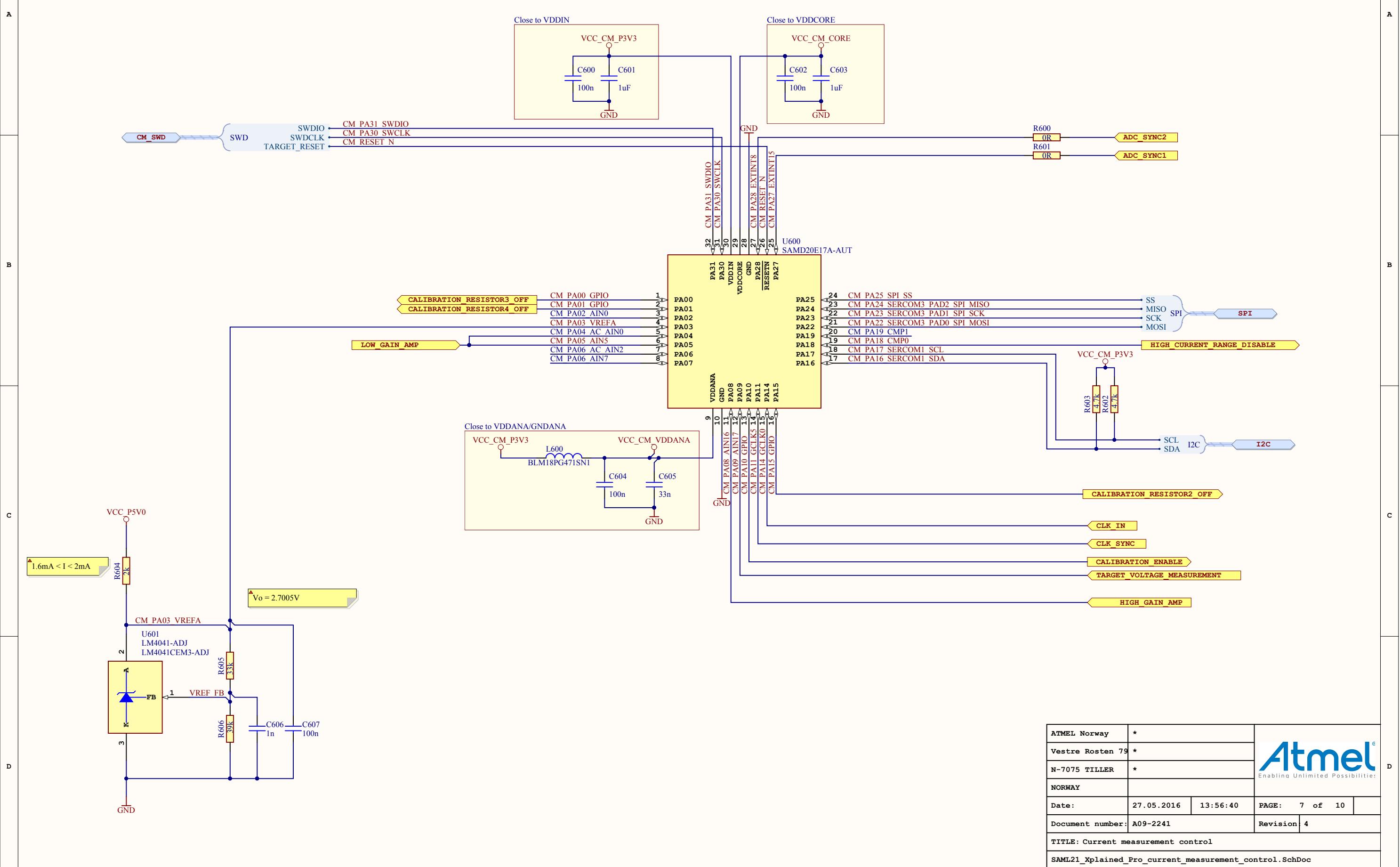


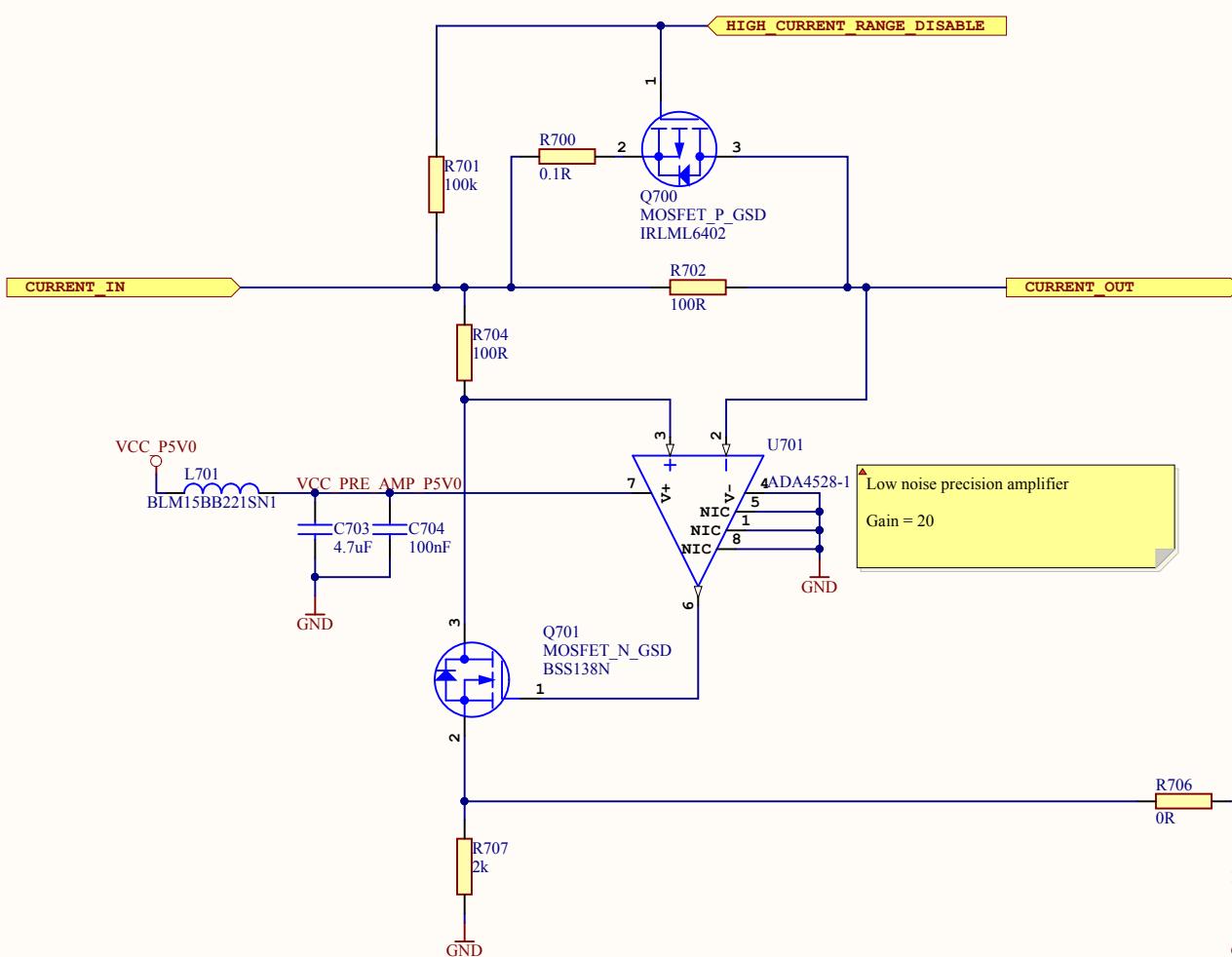
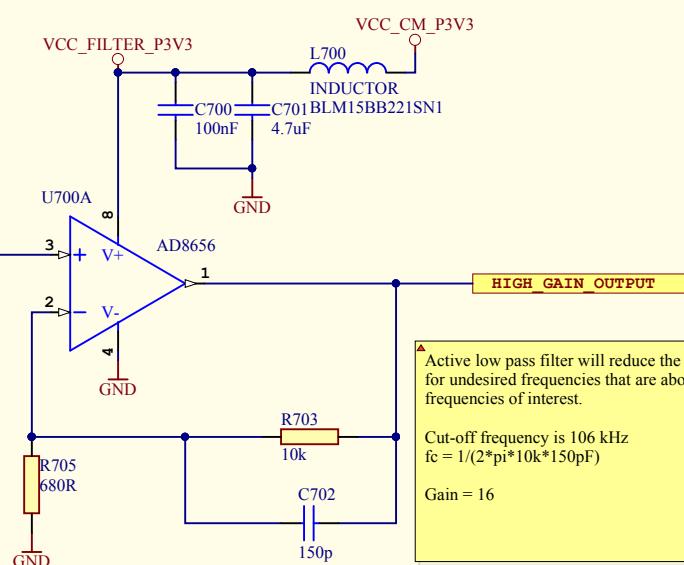
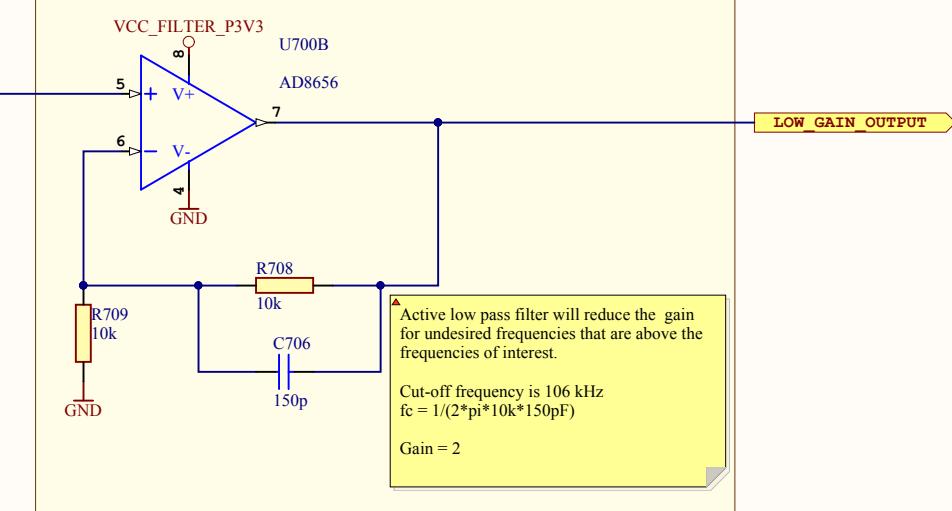




ATMEL Norway	*	
Vestre Rosten 79	*	
N-7075 TILLER	*	
NORWAY		
Date:	27.05.2016 13:56:40	PAGE: 6 of 10
Document number:	A09-2241	Revision 4
TITLE: Current measurement		
SAML21_Xplained_Pro_current_measurement.SchDoc		

Atmel
Enabling Unlimited Possibilities



**Active low pass filter with gain****Active low pass filter with gain**

ATMEL Norway	*	 Atmel Enabling Unlimited Possibilities
Vestre Rosten 79	*	
N-7075 TILLER	*	
NORWAY		
Date:	27.05.2016 13:56:40	PAGE: 8 of 10
Document number:	A09-2241	Revision 4
TITLE: Current measurement frontend		
SAML21_Xplained_Pro_current_measurement_frontend.SchDoc		

A

A

B

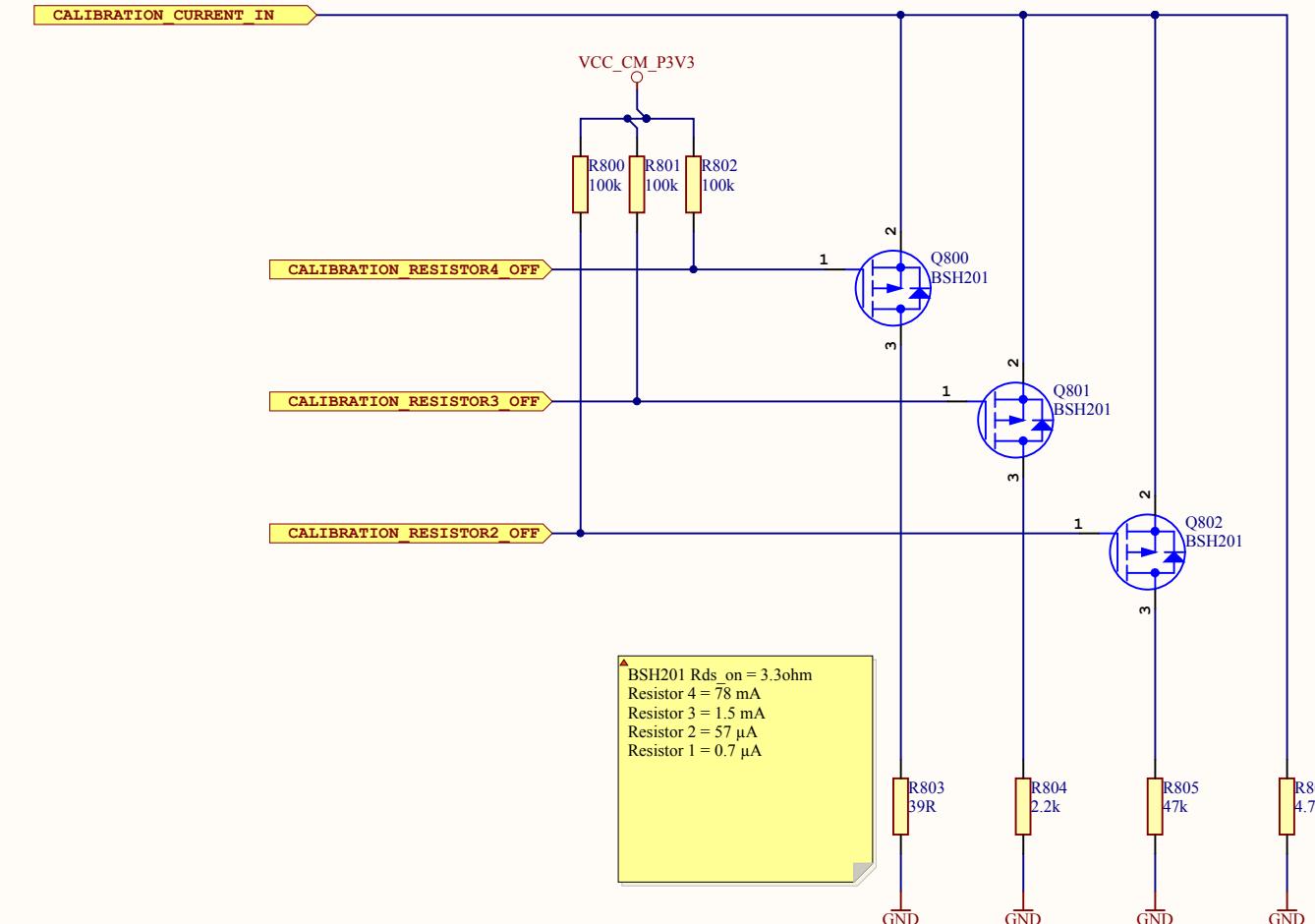
B

C

C

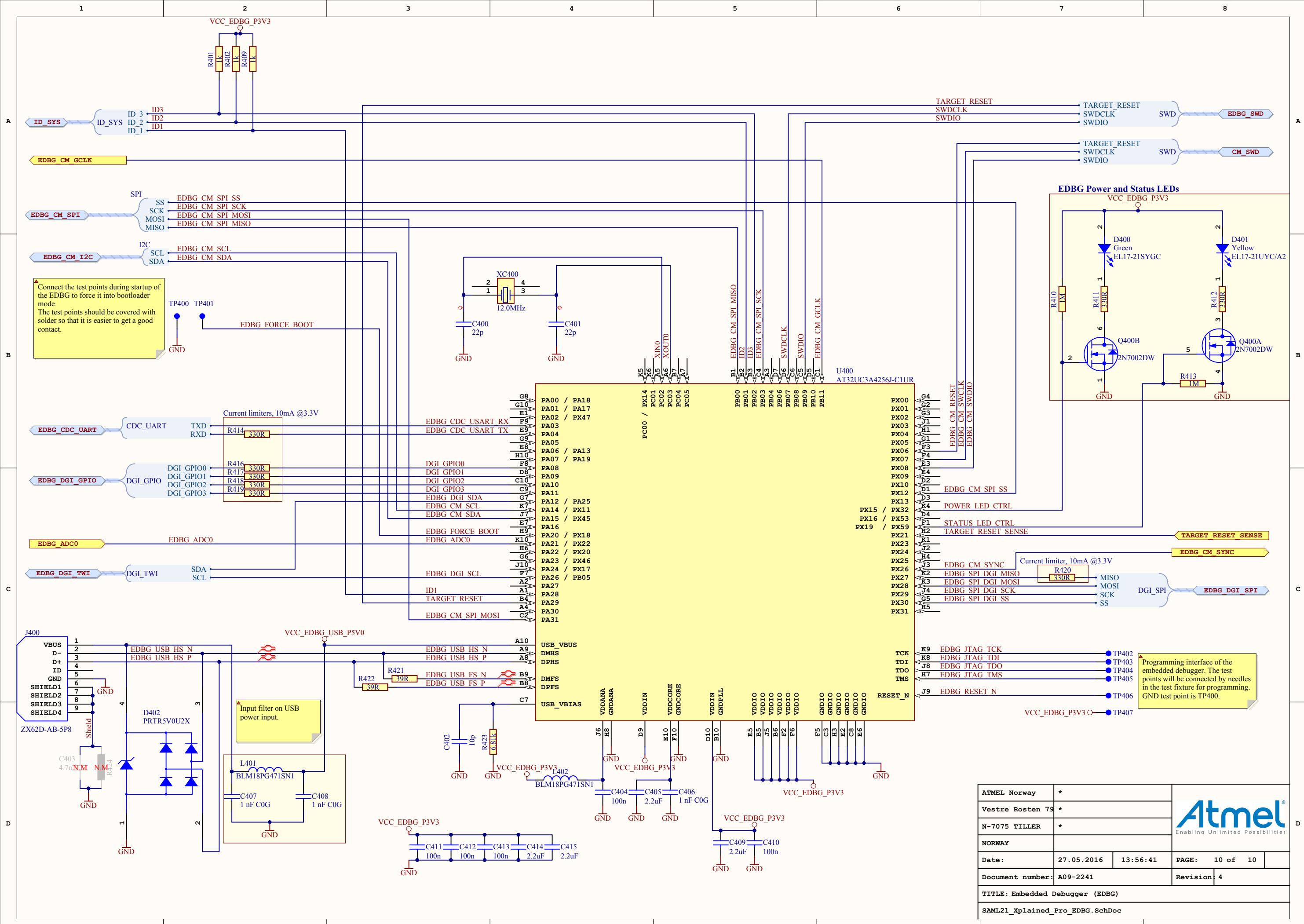
D

D

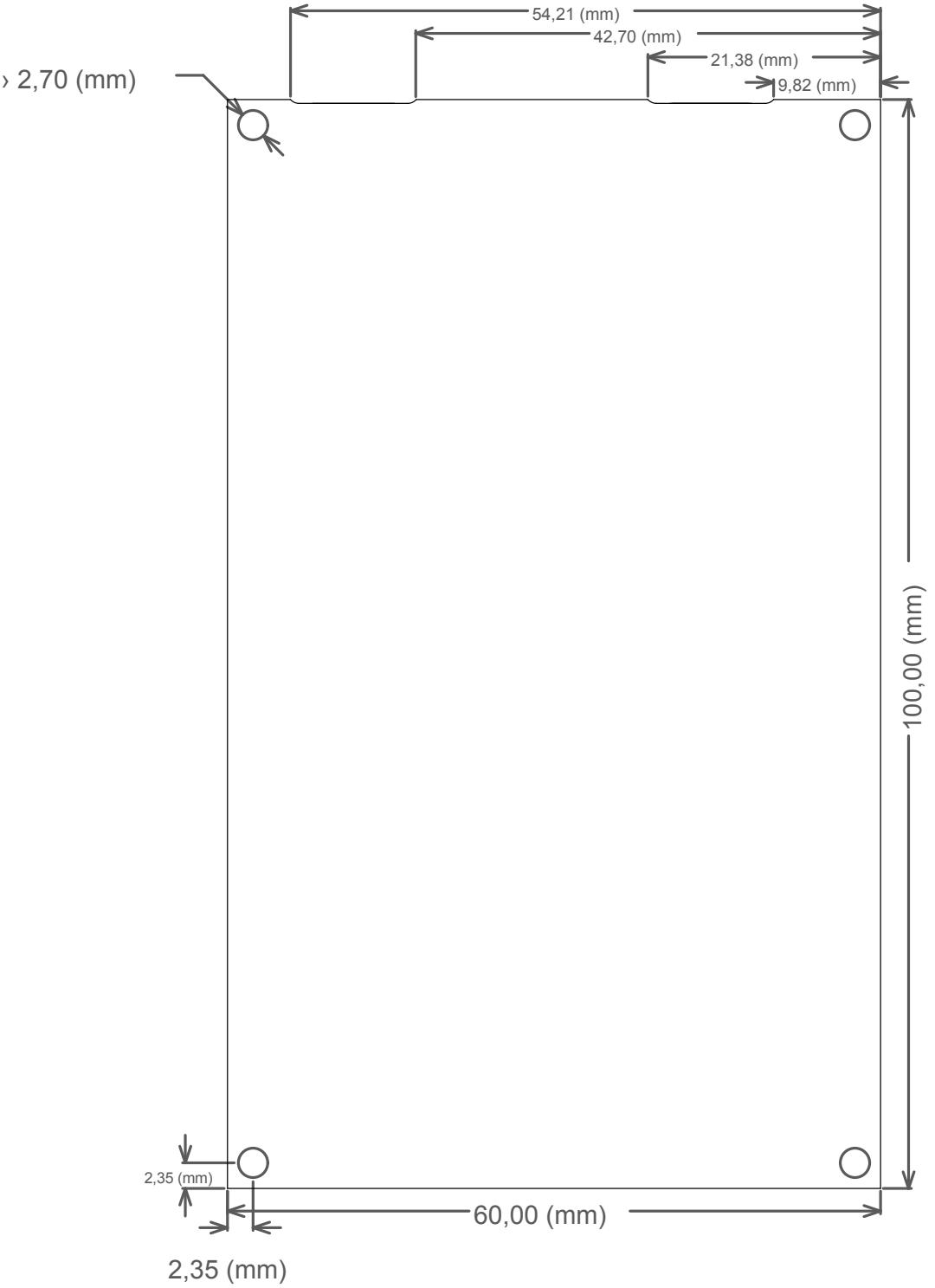


ATMEL Norway	*	
Vestre Rosten 79	*	
N-7075 TILLER	*	
NORWAY		
Date:	27.05.2016	13:56:41
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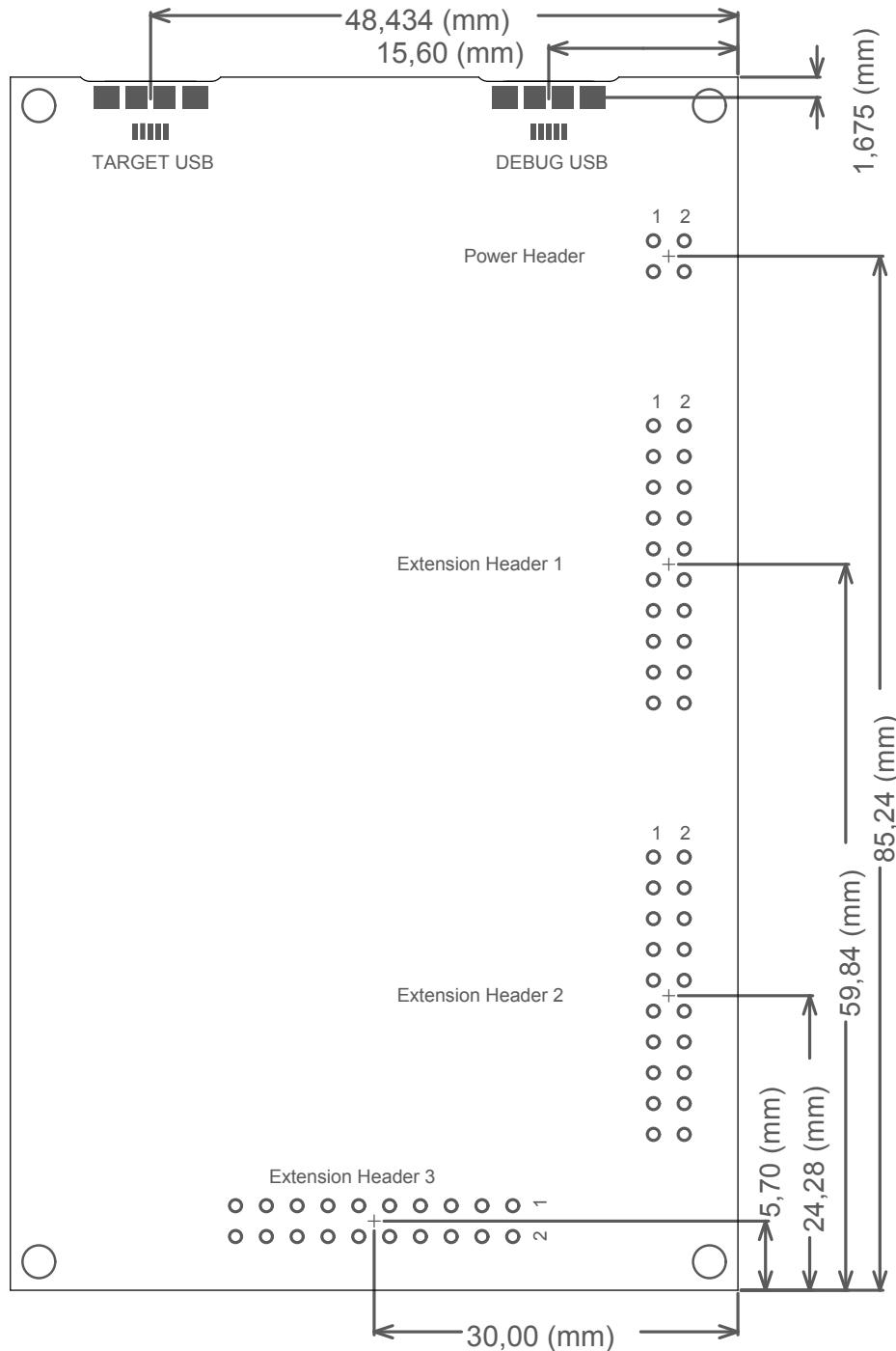
Atmel[®]
Enabling Unlimited Possibilities

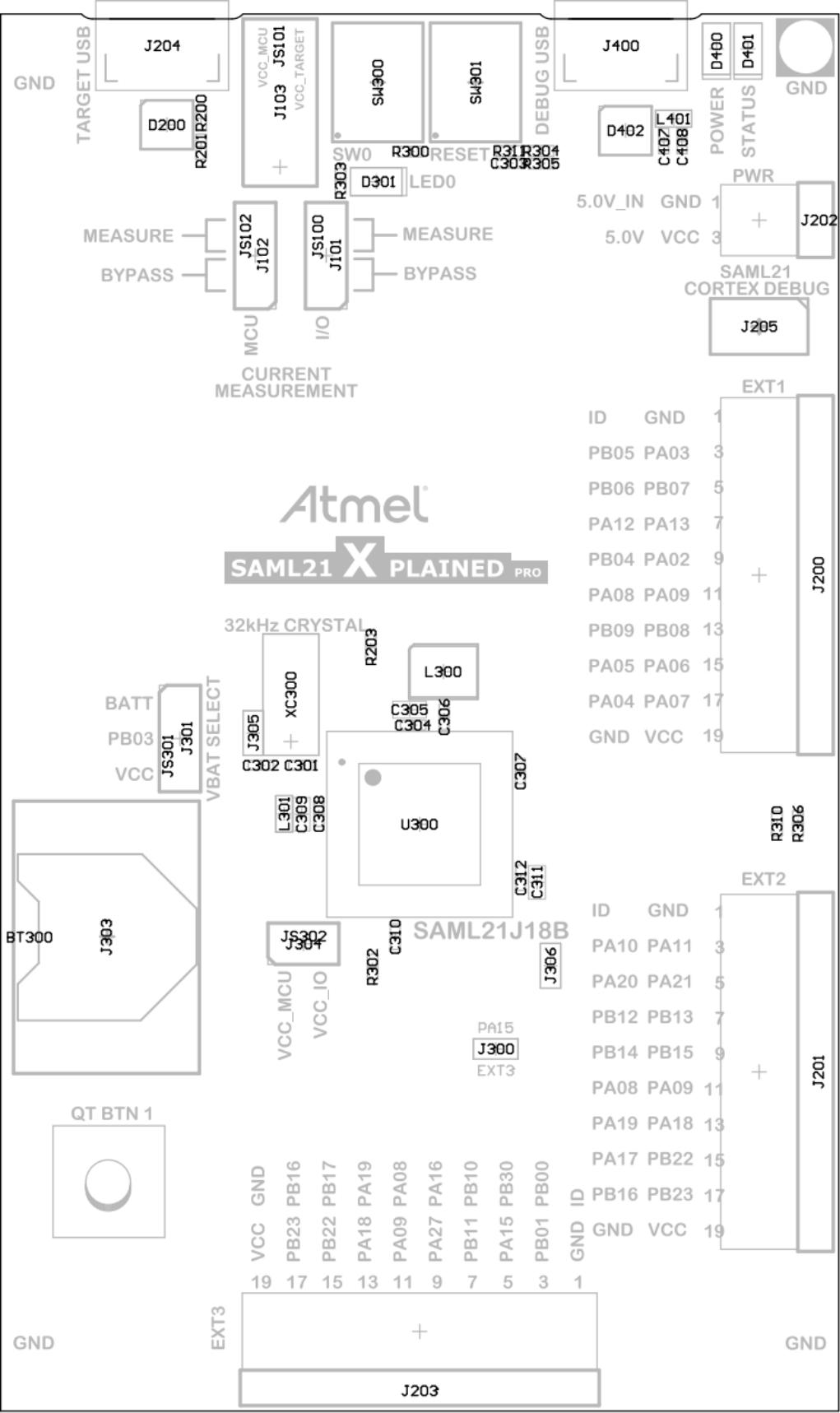


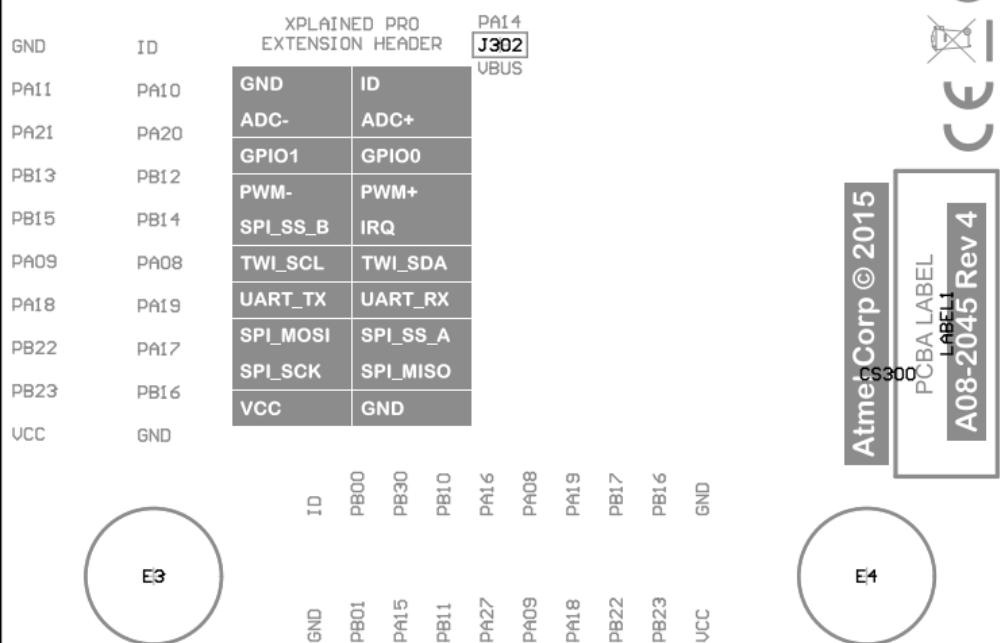
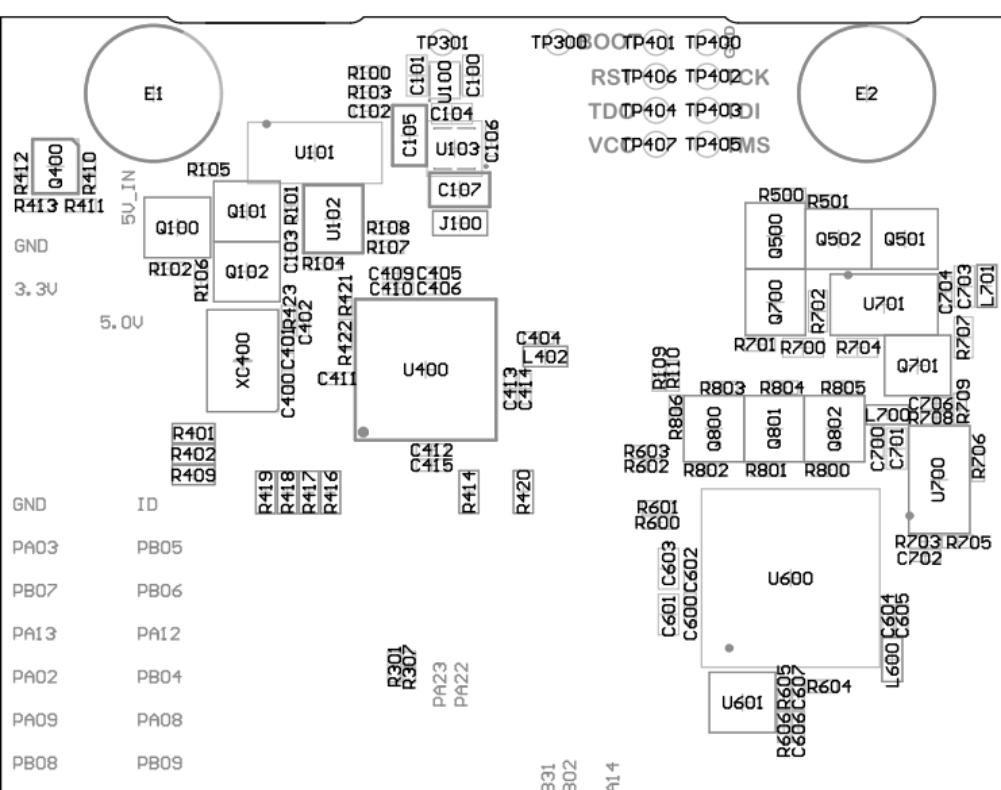
Medium MCU Mechanical Dimensions

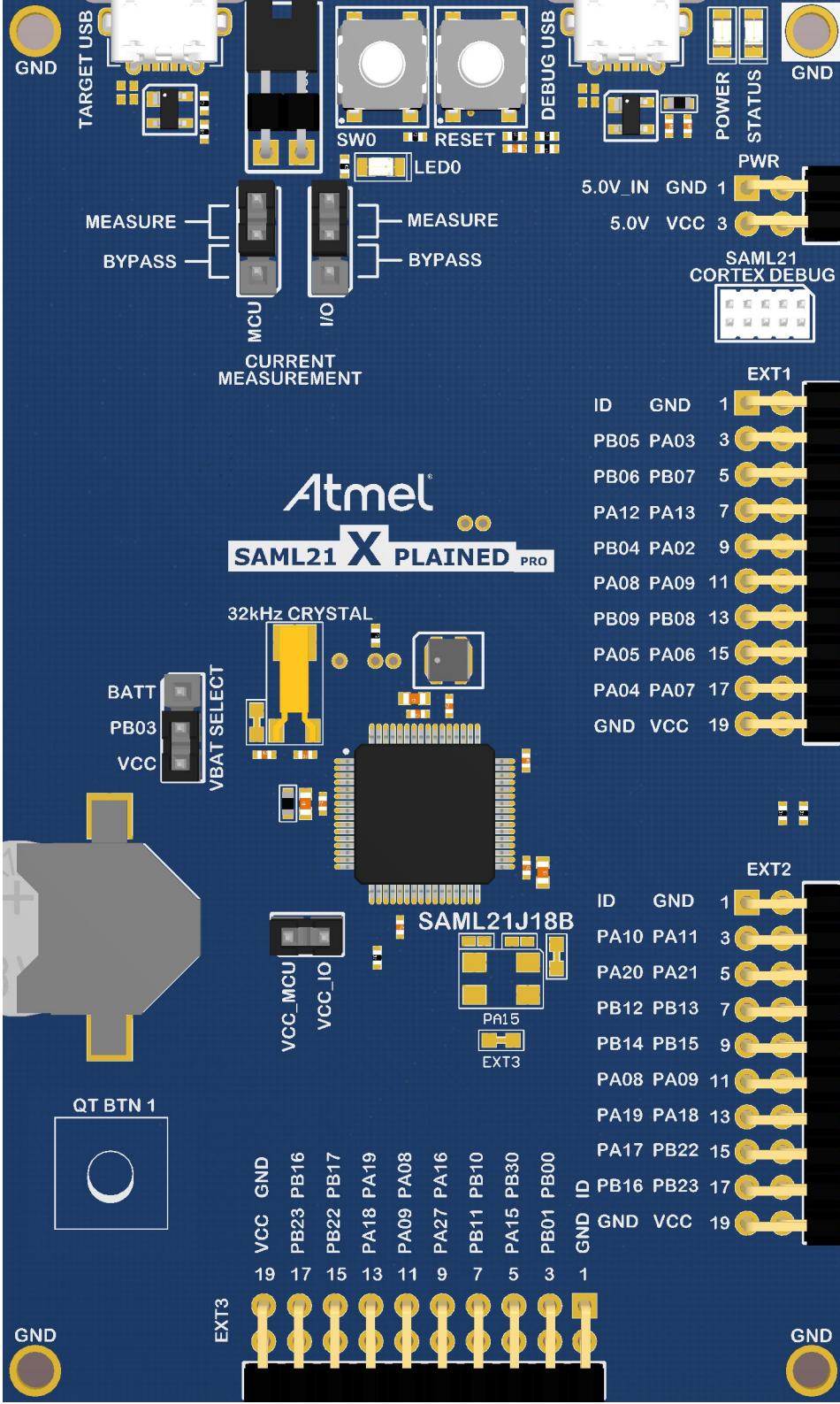


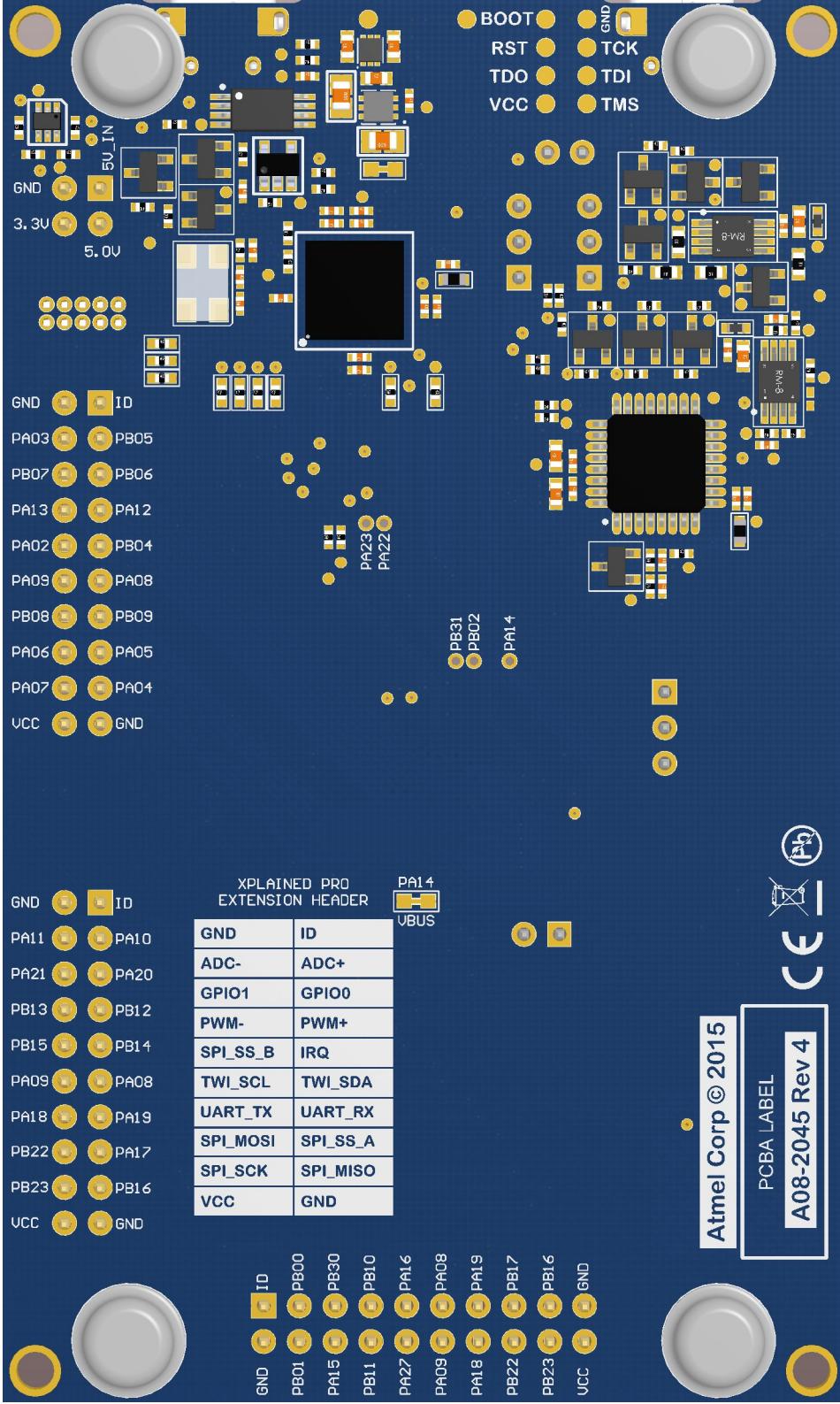
Medium MCU Connector Placement

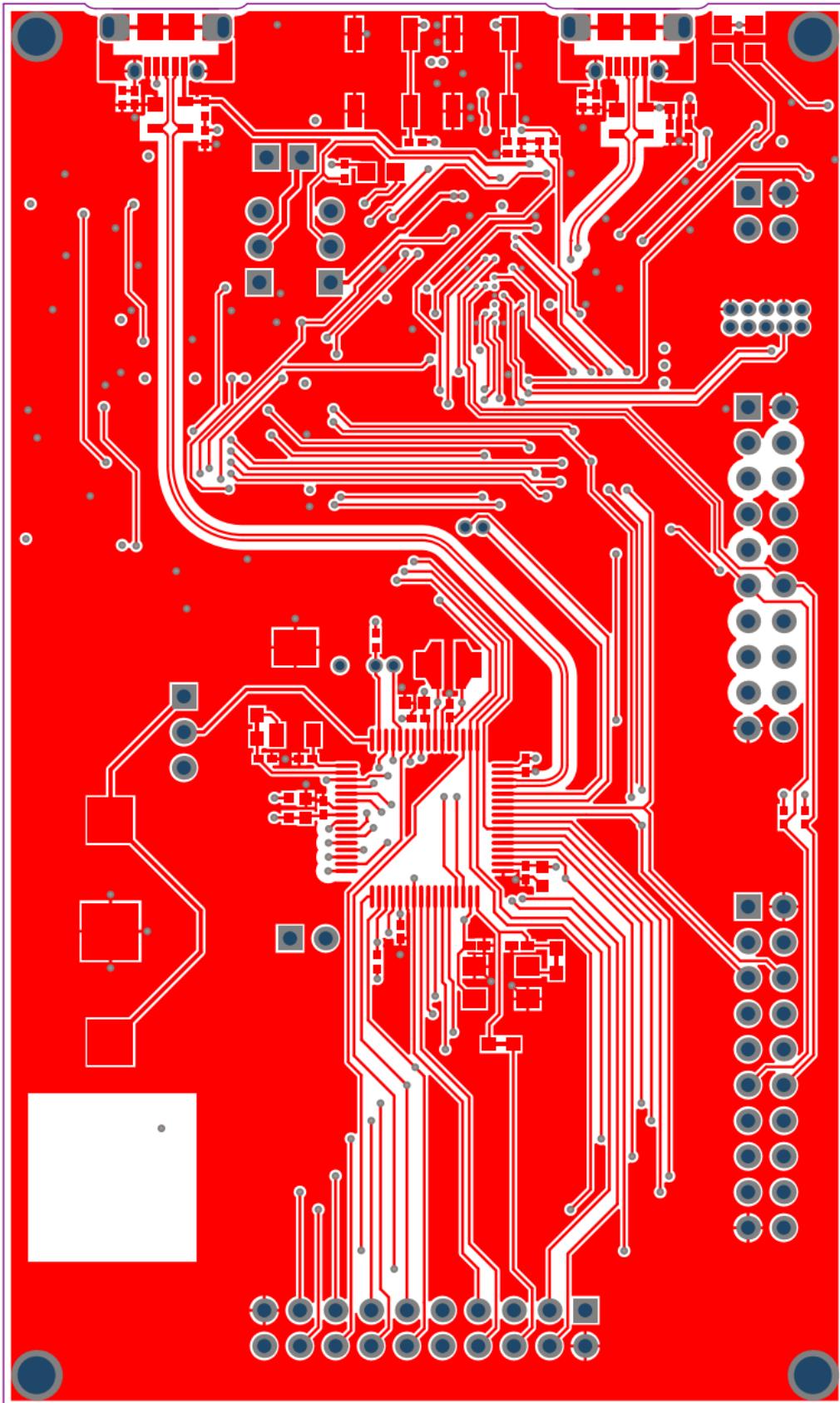




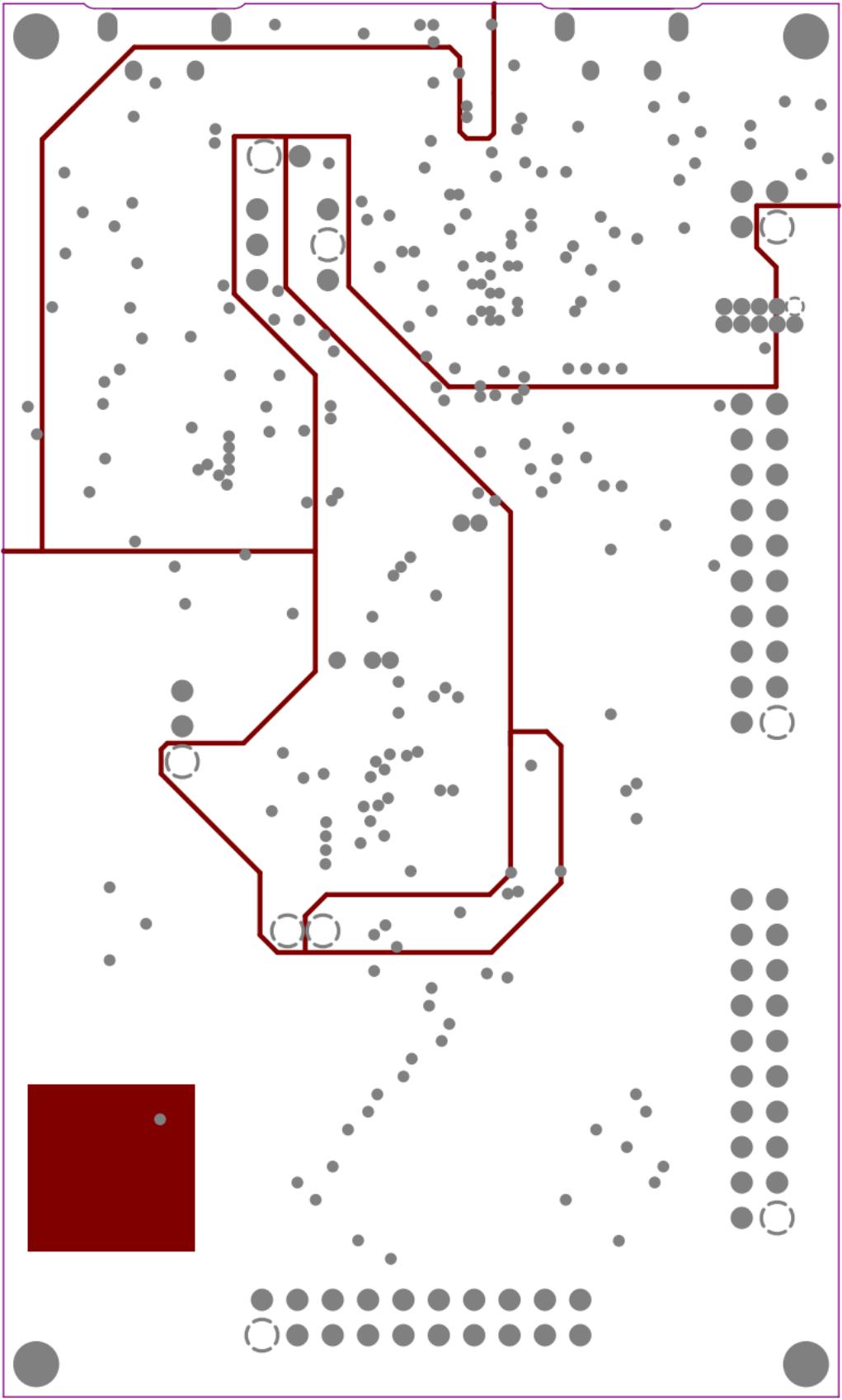


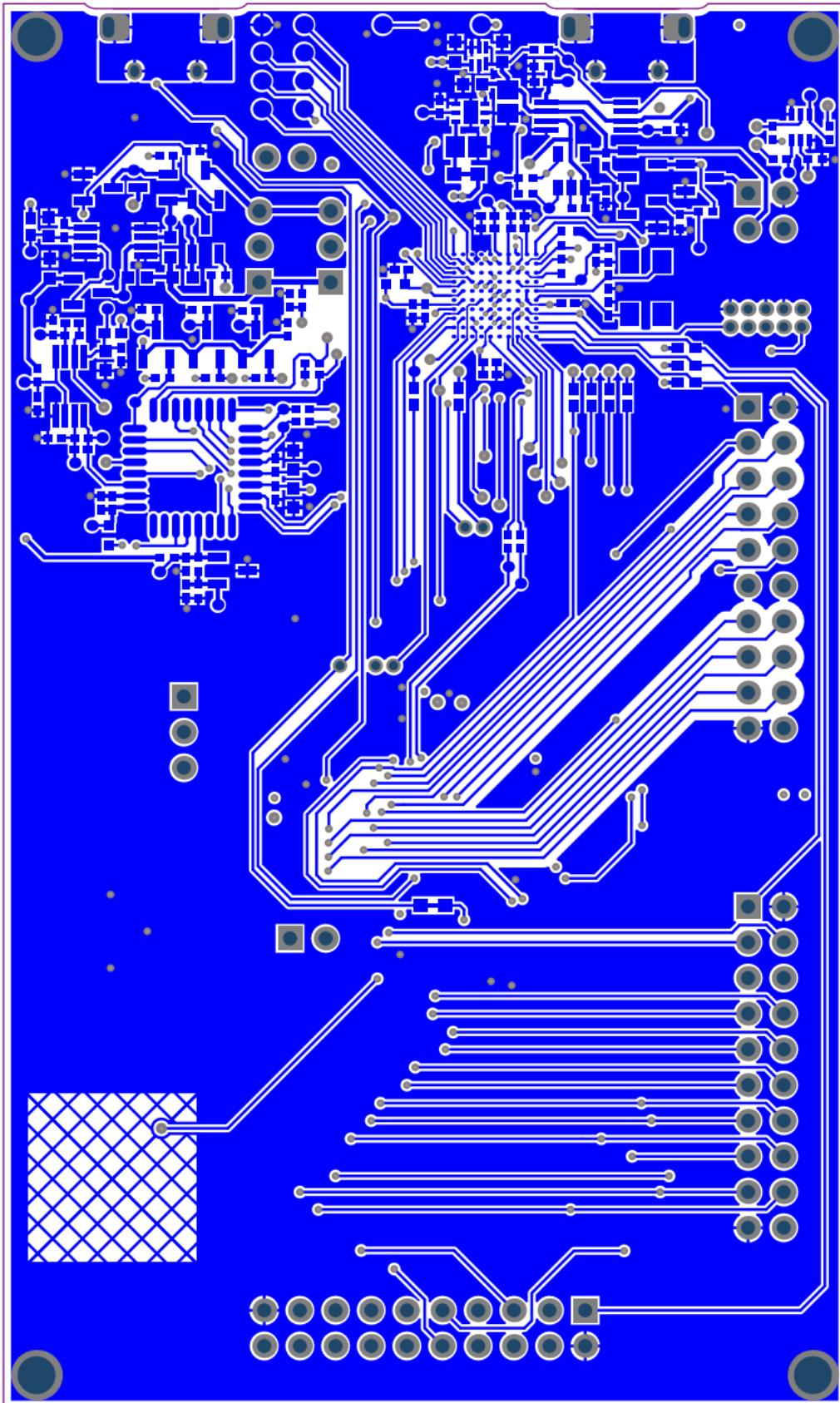












Component list

Top Level Schematics

Source Data From:

SAML21_Xplained_Pro.PPrPCB

Project:

SAML21_Xplained_Pro.PPrPCB

Variant:

Default_assembly



		Report Date:	27.05.2016	13:57:04
		Print Date:	27.05.2016	13:54:07
Fitted				
	Designator	Quantity	Value	Manufacturer
Fitted	BT300	1	CR1220	Panasonic
Fitted	C100, C101, C104, C305, C309, C311, C701, C703	8	4.7uF	tdk
Fitted	C102, C103, C304, C307, C308, C310, C312, C600, C602, C604, C607	11	100n	Kemet
Fitted	C105, C107	2	22u/10V	tdk
Fitted	C106	1	10n	
Fitted	C301, C302	2	6.8p	
Fitted	C303	1	4.7n	
Fitted	C306	1	1u	Kemet
Fitted	C400, C401	2	22p	
Fitted	C402	1	10p	
Fitted	C404, C410, C411, C412, C413	5	100n	Kemet
Fitted	C405, C409, C414, C415	4	2.2uF	Kemet
Fitted	C406, C407, C408	3	1 nF/0.0G	Murata
Fitted	C601, C603	2	1uF	Murata
Fitted	C605	1	33n	Murata
Fitted	C606	1	1n	
Fitted	C700, C704	2	100nF	
Fitted	C702, C706	2	150p	
Fitted	D200, D402	2	PRTR5V0U2X	Philips
Fitted	D301, D401	2	EL17-21UYC/A2	Everlight
Fitted	D400	1	EL17-21SYGC	Everlight
Fitted	E1, E2, E3, E4	4	SJ-5076	SJ-5076
Fitted	Fixture1	1	Xplained PRO MCU board Jupiter Test Fixture	ESCATEC
Fitted	FW1	1	EDBG secured firmware	ATMEL
Fitted	J101, J102, J301	3	HMTSW-103-23-F-S-237	SAMTEC
Fitted	J103	1	Pin header 1x2 right angle	Pro-data International Corp
Fitted	J200, J201, J203	3	P101-210RGF-139-ND	P101-210RGF-139-ND
Fitted	J202	1	P101-210RGF-139-ND	P101-210RGF-139-ND
Fitted	J204, J400	2	ZX62D-AB-5P8	
Fitted	J205	1	PIN HEADER 2x5	Garry
Fitted	J303	1	3000TR	Keystone Corp.
Fitted	J304	1	HMTSW-102-23-F-S-237	SAMTEC
Fitted	JS100, JS101, JS102, JS301, JS302	5	SNT-100-BK-G	SAMTEC
Fitted	L300	1	LQH3NPN100MU0	Murata
Fitted	L301, L401, L402, L600	4	BLM18PG471SN1	Murata
Fitted	L700, L701	2	BLM15BB221SN1	Murata
Fitted	LABEL1	1	Label PCB	ACT Logimark AS
Fitted	PCB1	1	SAML21 Xplained Pro PCB	505462
Fitted	PCBADC01	1	A09-2241 PCBA Files	
Fitted	Q100, Q101	2	IRML6402PBF	International Rectifier
Fitted	Q102	1	2N7002.215	NXP
Fitted	Q400	1	2N7002DW	Fairchild
Fitted	Q500	1	PMV48XP	NXP
Fitted	Q501, Q701	2	BSS138N	Infineon
Fitted	Q502, Q800, Q801, Q802	4	BSH201	NXP
Fitted	Q700	1	IRML6402	International Rectifier
Fitted	R100, R103, R104, R410, R413	5	1M	
Fitted	R101, R107, R108, R304, R500, R501, R701, R800, R801, R802	10	100k	
Fitted	R102, R606	2	39k	
Fitted	R105	1	390R	
Fitted	R106, R109, R110, R201, R805	5	47k	
Fitted	R200	1	30k	
Fitted	R203, R303, R411, R412	4	330R	
Fitted	R300, R305, R311, R421, R422, R803	6	39R	
Fitted	R301, R307, R600, R601, R706	5	0R	(n/a)
Fitted	R302, R703, R707, R709	4	10k	vishay
Fitted	R303, R310, R602, R603	4	4.7k	
Fitted	R401, R402, R409	3	1k	
Fitted	R414, R416, R417, R418, R419, R420	6	330R	
Fitted	R423	1	6.81k	
Fitted	R604	1	2k	
Fitted	R605	1	33k	
Fitted	R700	1	0.1R	vishay
Fitted	R702, R704	2	100R	Panasonic
Fitted	R705	1	680R	
Fitted	R707	1	2k	
Fitted	R804	1	2.2k	
Fitted	R806	1	4.7M	
Fitted	SW300, SW301	2	SKRAAKE010	ALPS
Fitted	TEST1	1	SAML21 Xplained Pro Test	SKRAAKE010
Fitted	TEST1DOC1	1	SAML21 Xplained Pro Test Instructions	
Fitted	U100	1	TLV70033DSE	Texas Instruments
Fitted	U101	1	TPS2113PWR	Texas Instruments
Fitted	U102	1	STMP5216ISTR	
Fitted	U103	1	TPS7533DRV	Texas Instruments
Fitted	U300	1	ATSAM21J18B-AUT	
Fitted	U400	1	AT32UC3A44256J-C1UR	ATMEL
Fitted	U600	1	SAMD20E17A-AUT	ATMEL
Fitted	U601	1	LM4041CEM3-ADJ	National Semiconductor
Fitted	U700	1	AD8656	Analog Devices
Fitted	U701	1	ADA4528-1	Analog Devices
Fitted	XC300	1	32.768kHz +/-20PPM 7pF SMD	Micro Crystal
Fitted	XC400	1	12.0MHz	Fox Electronics
Not Fitted	C200, C403	0	4.7n	
Not Fitted	C300, C313	0	22p	
Not Fitted	C705	0	1n	
Not Fitted	R202, R424	0	1M	KOA
Not Fitted	XC301	0	12.0MHz	Fox Electronics